



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

W

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,702	12/13/2001	Gary L. Koteskey	11074/006	2101
27879	7590	04/22/2004	EXAMINER	
INDIANAPOLIS OFFICE 27879 BRINKS HOFER GILSON & LIONE ONE INDIANA SQUARE, SUITE 1600 INDIANAPOLIS, IN 46204-2033			OCAMPO, MARIANNE S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,702

Applicant(s)

KOTESKEY, GARY L.

Examiner

Marianne S. Ocampo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-12,14-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-18 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-6,8-12,14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the limitation “**engagement tangs**” in the second to the last line of claims 16 and 20, lacks proper antecedent basis in the specification. For examination purposes, the examiner has considered “engagement tangs” to be one and the same structure being referred to in the specification as “tabs”, indicated by reference numbers 64 and 66 in fig. 4 of the instant application. In order to prevent confusion, it is suggested that applicant use the same name or nomenclature used in the figures of the drawings of the claimed device for structures being claimed. In other words, the word “tangs” should be changed to “tabs”.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 3, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozerski (US 2,690,569) in view of Abel (US 5,582,744) and Gilbert (US 877, 324).

4. Concerning claim 1, it is unclear if applicant is actually claiming a combination of the filter element with a waste water discharge system having a predetermined interior dimension and a lateral outlet in alignment with an intermediate portion of the filter element, or a subcombination in the form of only the filter element. For examination purposes, the examiner considered the subcombination. Kozerski discloses a filter element capable of/for use in a waste water discharge system (which would be part of a sink or wash tub), the filter element comprising:

- a substantially linear axial support (10) of a pre-selected length (see fig. 2 only),
- a handle (12) fixed to the axial support facilitating the placement and withdrawal of the filter element, and
- a plurality of bristles (11 & 18) fixed to and extending radially outward from the axial support (10) to an outer margin, the outer margin of the bristles defining a substantially continuous surface generally symmetric about the axial support, the outer margin including at least one portion (18) defining a first selected radius (defined by the outer periphery of the bristles in the portion 18) which can be at least as large as an expected/pre-determined interior dimension of a conduit part of a sink/wash tub or waste water discharge system and at least two

of the plurality of portions being separated by an intermediate portion (11), which can be placed or located in alignment with a lateral outlet of the discharge/sink/tub system, wherein the bristles of the intermediate portion (11) of the filter element terminate short of the first selected radius, as in fig. 2 and cols. 3 – 4.

Kozerski fails to disclose the outer margin including a plurality of portions defining the first selected radius and the intermediate portion separating at least two of the plurality of portions.

5. Abel teaches at least one filter element, similar to that of Kozerski, the filter element (40, 44) of Abel including a substantially linear axial support (46) and a plurality of brush elements having bristles (40, 44) having an outer margin including a plurality of portions (set of bristles 40, 44) defining a first selected radius which is at least as large as expected/predetermined interior dimension of a conduit/pipe (39, 38) which could be a waste water discharge pipe, and at least two of the portions are separated by an intermediate portion devoid of bristles, as in fig. 3 and cols. 3 – 4.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the filter element of Kozerski by adding the embodiment taught by Abel, in order to provide an improved filter element having the ability to remove/separate from a fluid particulate/solid materials therefrom more effectively and which is also incapable of becoming plugged (see cols. 2 – 3 of Abel).

6. Kozerski, as modified by Abel, fail to disclose the intermediate portion which separate the plurality of portions having a first radius having bristles terminating short of the first radius. Gilbert (324) teaches a cleaning device (i.e. a brush) similar to that of Kozerski and Abel, capable of use as a filter element in a waste water discharge system, the brush of Gilbert including a substantially linear axial support (2, stiff core) of a pre-selected length, and a plurality of bristles fixed to and extending radially outward from the axial support (2) to an outer margin, the outer margin of the bristles defining a substantially continuous surface generally symmetric about the axial support, the outer margin including a plurality of portions defining a first selected radius which could be at least as large as an expected/predetermined interior dimension of a pipe/waste discharge system, and at least two of the plurality of portions being separated by an intermediate portion having bristles which terminate short of the first selected radius, as in figs.1 - 3 and pages 1 - 2.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the shape as well as the outer dimensions/margin of the bristles of the filter element of Kozerski, as modified by Abel, by adding the embodiment taught by Gilbert, in order to provide an alternative and improved design which allows further filtering (at least partially) of the fluid flow in the intermediate portions separating the plurality of portions of the filter element of Kozerski as modified by Abel, as well as provide a filter element having a configuration allowing its use in tubular housings of different diameters, as in lines 11 – 20 of Gilbert.

6. Regarding claim 2, Kozerski, as modified by Abel and Gilbert, has disclosed the limitations of claim 1 above. Kozerski, as modified by Abel and Gilbert, also teaches the axial support (10 of Kozerski or 2 of Gilbert) comprising a spiral wound (i.e. twisted) set of wires, the bristles being captured between the set of wires, as in fig. 2 and cols. 3 – 4 of Kozerski and in fig. 1 of Gilbert.

7. With respect to claim 3, Kozerski, as modified by Abel and Gilbert, has disclosed the limitations of claim 1 above. Kozerski further discloses the handle (12) comprising a unitary extension of the axial support (10), as in fig. 2 and col. 3.

8. With respect to claim 6, Kozerski, as modified by Abel and Gilbert, has disclosed the limitations of claim 1 above. Kozerski also discloses the bristles being straight, as in figs. 1 - 4.

10. Regarding claim 8, Kozerski, as modified by Abel and Gilbert, has disclosed the limitations of claim 1 above. Kozerski, as modified by Abel and Gilbert, further teach the device/filter element having a plurality of the intermediate portions, as in figs. 2 – 3 of Gilbert. The same motivation applied in claim 1 above is applied here.

11. Claims 9 – 10, 12 and 14 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abel (US 5,582,744) in view of Kozerski (569).

12. With regards to claim 9, Abel discloses a filter capable of being used in a filtering section of a waste water discharge system, the filter including a generally vertical channel (14, 38, 39) defining a receptacle for a filter/filter element (40), the channel including an inlet which can be either at a lower end (in the vicinity of 16, 26) or an upper end (in the vicinity of vessel 12) of the receptacle (38, 14) and an outlet (20 or 22) extending from an upper portion of the receptacle (38, 14, 12) and at least one filter element in the form of a brush element (40, 44), each of the filter element comprising:

- a substantially linear axial support (46) of preselected length; and
- a plurality of bristles (40, 44) fixed to the axial support (46) and extending radially outward to define an outer margin, the outer margin defining a substantially continuous surface generally symmetric about the axial support (46) and at some portions of the preselected length being at least equal to an inside dimension of the channel (38, 39) so that water or any fluid flowing from the inlet to the outlet must pass through between the bristles to filter the fluid/water and along at least one intermediate portion, there are no bristles to create a space from inside the channel (38, 39) and the outer margin of the bristles including an indentation (i.e. space between the bristles) which can be located in alignment with a lateral outlet of a waste water/filter system, as in figs. 1 – 3 and cols. 3 – 4.

Abel fails to disclose a handle fixed to the axial support for placement and withdrawal of the filter element and the outer margin of the bristles along at least one intermediate portion being sufficiently short to be spaced from the inside (surface) of the channel (which creates the indentation of the outer margin mentioned above).

13. Kozerski teaches a filter element in the form of a brush, similar to that of Abel, including a substantially linear axial support (10, 14), a handle (12) fixed to the axial support facilitating placement and withdrawal of the filter element, and a plurality of bristles (11, 18) fixed to the axial support (14) extending radially outward to define an outer margin, wherein the outer margin of the bristles along at least one intermediate portion (middle bristle portion 11) being sufficiently short, thereby creating a brush/filter element which has an intermediate portion which would be spaced from the inside (surface) of a channel (in which the brush/filter element would be placed into), as in fig. 2 and cols. 3 – 5.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the filter element of the filter of Abel, by adding the embodiment of the filter element of Kozerski, in order to provide an improved filter element having various bristles with different diameters/cross-sections, thereby allowing full and partial filtration of fluids passing through the filter element, for a cleaner fluid/water for discharge.

14. Concerning claim 10, Abel, as modified by Kozerski, has taught the limitations of claim 9 above. Abel also fails to disclose the axial support comprising a spiral wound set of

wires with the bristles captured between the wires. Kozerski further teaches the axial support (10, 14) of the filter/brush element (fig. 2) being comprised by a spiral wound set of wires with bristles being captured between the wires, as in fig. 2 and cols. 3 – 4. The same motivation applied in claim 9 is applied here.

15. With regards to claim 12, Abel, as modified by Kozerski, has taught the limitations of claim 9 above. Abel further discloses the filter comprising a plurality of intermediate portions (i.e. spaces between bristle portions 40, 44) along the length of axial support (46), as in fig. 3.

16. Regarding claim 14, Abel, as modified by Kozerski, has taught the limitations of claim 9 above. Although Abel, as modified by Kozerski, does not teach the cross-sectional diameter of the bristles being of between about 0.2 and 0.004 cm, it is considered obvious to one of ordinary skill in the art at the time of the invention to modify the diameter of the bristles depending upon the inside diameter of the filter receptacle or channel for the fluid to be filtered, which could have an inside diameter value of about 0.2 - 0.004 cm, in order to effectively trap all particulates and prevent bypassing of the fluid. Furthermore, Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984)], cert. Denied, 469 U.S. 830, 225 USPQ 232 (1984), has established (The Fed. Circuit held) that where the only difference between the prior art and the claims was a recitation of relative dimensions (in this instance, cross-sectional diameter of the bristles) of the claimed device and a device having the claimed relative

dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

17. Concerning claim 15, Abel, as modified by Kozerski, has taught the limitations of claim 9 above. Although Abel, as modified by Kozerski, does not teach the bristles are present in an amount between about 10^2 (100) and 10^4 (1000) per centimeter of the length of the axial support, it is considered obvious to one of ordinary skill in the art to modify the density (i.e. amount) of the bristles by having at least 100 and up to 1000, in order to provide the sufficient density and porosity/space between bristles for trapping unwanted particulates or constituents from a fluid being passed through and filtered by the filter element. It is considered that the amount of at least 100 to 1000 bristles per centimeter of the length of the axial support being an optimum value for this result effective variable that would provide the best filtering surface by the filter element. See the case, *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) which stated:

"The discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art, and thus a prima facie case of obviousness is established."

18. Claims 4 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozerski, Abel and Gilbert, as applied to claim 3 above, and further in view of Russell (US 5,423,621).

19. With regards to claim 4, Kozerski, as modified by Abel and Gilbert, has taught the limitations of claim 3 above. Kozerski, as modified by Abel and Gilbert fails to teach the handle extending radially to only one side of the axial support.

20. Russell teaches a brush, similar to that of Kozerski, as modified by Abel and Gilbert, capable of use as a filter element in a waste water discharge system, the brush of Russell including an axial support (22, 322) of pre-selected length, a handle (28, 328) fixed to the axial support for facilitating placement and withdrawal of the device, and a plurality of bristles (334) fixed to and extending radially outward from the axial support (322) to an outer margin, the outer margin of the bristles defining a substantially continuous surface generally symmetric about the axial support, and further teaches the handle (328) extending radially to only one side of the axial support, as in figs. 1 – 2 & 8 and cols. 5 – 6.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the handle of the filter element of Kozerski, as modified by Abel and Gilbert, by adding the embodiment taught by Russell, in order to provide an alternative handle design which is easy to grip by hand and provides for easier rotation of the filter element, thereby allowing better straining and cleaning of debris when used within a pipe of a waste water discharge system, as in col. 2, lines 50 – 53 & 60 – 63.

21. Concerning claim 5, Kozerski, as modified by Abel, Gilbert and Russell, has taught the limitations of claim 4 above. Russell further teaches the filter element/brush (embodiment shown in fig. 6, 232) for a filtering/cleaning/brush-type device having an axial support (222,228) of a pre-selected length, a handle (232) and a plurality of bristles (234b,234c, 234) fixed to and extending radially outward from the axial support and the bristles having a first selected radius (234c), wherein the handle (232) extending radially to only one side of the axial support and further including a terminal portion (230) extending parallel to the axial support at a position separated from the axial support by a distance greater than the first selected radius, as in fig. 6.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the handle of the filter element of Kozerski, as modified by Abel, Gilbert and Russell, by further adding the embodiment taught by Russell, in order to provide an improved handle which provides a means for rotating the filter element, thereby allowing cleaning of its receptacle as the filter element is rotated or spun within the receptacle of the filter (see col. 5 of Russell).

22. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abel and Kozerski, as applied in claim 9 above, and further in view of Russell (621).

23. With regards to claim 11, Abel, as modified by Kozerski, has taught the limitations of claim 9 above. Abel, as modified by Kozerski, fails to teach the handle comprising a unitary

extension of the axial support extending radially only to one side of the axial support by a distance to overlie an upper margin of the vertical channel.

24. Russell teaches a brush device, similar to the filter of Abel and Kozerski, the device of Russell including a brush/filter element comprising a plurality of bristles (334), a substantially linear axial support (322) fixed to the plurality of bristles and a handle (328) comprising a unitary extension of the axial support (332) extending radially only to one side of the axial support at a distance sufficient to overlie an upper margin of a vertical channel (332), as in fig. 8.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the handle of the filter of Abel, as modified by Kozerski, by adding the embodiment taught by Russell, in order to provide an alternative handle design which is easy to grip by hand and provides for easier rotation of the filter element, thereby allowing better straining and cleaning of debris when used within a pipe of a waste water discharge system, as in col. 2, lines 50 – 53 & 60 – 63.

Allowable Subject Matter

25. Claims 16 – 18 and 20 are allowed.

26. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art applied in the rejections above and those searched, have disclosed or rendered obvious a replacement filter kit having the combination of limitations recited in claims 16 including the limitations of the shield comprising a sheet generally conformable with the inside surface of the filter receptacle and having a length dimension sufficient to cover the outlet leading to the second channel and having two corners bent outward to provide engagement tangs (i.e. tongues) for engaging an upper margin of the first channel, as in claim 16, and a shield member having all the limitations recited in claim 20 including the limitation of two adjacent corners of the opposing edges of the shield member being bent outward to provide engagement tangs for engaging an upper margin of a filter receptacle.

Conclusion

27. Applicant's arguments with respect to claims 1 -6, 8 -12, and 14 - 15 have been considered but are moot in view of the new grounds of rejection set forth above. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (571) 272-1144. The examiner can normally be reached on Mondays to Fridays from 8:30 A.M. to 4:30 P.M..

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1723

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.S.O.
M.S.O.

Walker
W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700